## **APPENDIX F**

## SITE-SPECIFIC RESOURCE INFORMATION FOR MARINE OR SHORE USES IN UNIT 8B

## Introduction

The waters near Yakutat yield abundant fish and wildlife for community, sport, and commercial harvests, and for recreational viewing. These waters also provide excellent potential for aquatic farming. Future aquatic farms and other developments should avoid or minimize impacts to sensitive and heavily used marine areas. To foster careful development, DNR has compiled site-specific resource information on existing marine resources and uses near Yakutat.

The following table is adapted from the draft *Aquatic Farming Resources Report* prepared for this plan. The table identifies known resources and uses, potential conflicts, possible aquatic farming mitigation measures, and relative sensitivity to aquatic farming for 26 sites within Unit 8B. Local Yakutat representatives provided much of the resource and sensitivity information. In addition to these sites, Humpie Creek and Chicago Harbor just outside of Unit 8B are sensitive to development impacts.

The sites are numbered 12-36 (using the numbering scheme from the *Aquatic Farming Resources Report*). They are identified on the accompanying map. Several of these sites may occur within a single management subunit for the area plan. The subunit number in which the site lies is noted in small type (8b-1, 8b-2, 8b-3 or 8b-4). The sites numbered 1-11 in the *Aquatic Farming Resources Report* are upland areas outside the purview of this area plan.

LOCATION CANADA MAP CTMELOI Area Plan LAND Bay 35 KHANTAAK 15 LAND 34 TZCZZALD ISLAND 29 Broken Oa Cove 40N7, Map F.1 18 Resource Analysis Units Key to land Ownership: State owned land (Tentauvery approved) State owned land - hypothecated to Mental meauth Trust GUILF OF ALASKA State owned land - application by State Parks State owned land - managed by Debt. or Transportation & Public Factions State selections Municipal land - owned or salected Yak-Tai-Kwaan land Sealaska Corp. selected land Cther chyale land SCALE IN MILES

Map F.1
Resource analysis units for Unit 8B

Table F.1
Unit 8B: Existing Uses, Potential Conflicts, and Possible Mitigation by Site

No.	Name	Existing Uses and Potential Conflicts	Possible Mitigation
(8b-1)	Entire nearshore waters	Entire bay has numerous species of waterfowl, including some marbled murrelets. Commercial crabbing is mostly by local residents. Some locals also crab in the outside waters. Skiff fishermen are limited to inside waters. Pot shrimping is almost all local. Most pot shrimping is north east of Khantaak Island except Johnstone passage. Khantaak island is closed to trawling.	■ Standard mitigation.
12 (8b-2)	Very sensitive  Possible consideration for closure to aquatic farming	Navigation: access via skiff, mostly Subsistence: shellfish (especially crab), water- fowl - ducks & geese, clamming on reefs Commercial: Dungeness crabbing, salmon and redfish net fisheries Recreation/tourism: Recreation coho fishing, drive out and cast from shore, very popular. Remote, undeveloped Aesthetics: med-high Cultural: general area of New Russia site, former village fish sites and smoke house remnants Habitat: waterfowl concentrations Other: conflict is beginning to develop between sport and subsistence. Yak-tat Kwaan did a pilot project for oysters - rack and bag system.	■Avoid impacts to subsistence harvest, cultural resources, and recreation and aesthetic values. Minimize visible evidence of operation.
13 (8b-2)	Ankau #13 Somewhat sensitive	Navigation: Subsistence: shellfish - cockles & clams, waterfowl, seal hunting. Elders want the highest protection of subsistence at Ankau. Commercial: Recreation/tourism: culture camp Aesthetics: med-high; remote, secluded character Cultural: culture camp Habitat: Other: Yak-tat Kwaan has considered development plans for Ocean Cape. This area has much less use than Kardy Lake. Storms have occasionally breached the coastal barrier	<ul> <li>Avoid adverse impacts to culture camp, subsistence, and recreation and aesthetic values.</li> <li>Least sensitive Ankau area.</li> <li>Aquatic farm may be a tourist attraction if tourist lodgings are developed at Ocean Cape.</li> </ul>

Table F.1
Unit 8B: Existing Uses, Potential Conflicts, and Possible Mitigation by Site

No.	Name	Existing Uses and Potential Conflicts	Possible Mitigation
14 (8b-2)	Ankau Entrance  Extremely sensitive  Possible consideration for closure to aquatic farming	Navigation: high use, narrow opening, shallow, strongest currents, whirling eddies Subsistence: fish, one of the most abundant cockle sites Commercial: fish Recreation/tourism: high use. Easy road access from town in summer/fall.  Aesthetics: Cultural: cemetery Habitat: north shore selected by city for a park under ANCSA 14(c)3 Other:	<ul> <li>Close this area to aquatic farming. Existing uses seasonally saturate capacity of site. Navigation conflict is significant.</li> <li>Some community members desire to close this area in the Ankau to aquatic farming. Area 13 would be the location of low est conflict within the Ankau.</li> </ul>
15 (8b-1)	Port Mulgrave	Navigation: shallow, almost dry at low tide Subsistence: moderate Dungeness crabbing all the way into the tidal areas, possible rearing area for juvenile Dungeness. Low to moderate clam & cockle gathering.  Commercial: not heavily used Recreation/tourism:  Aesthetics:  Cultural: historic village site and burial sites, not visited much. Possible site for a cultural tourist attraction: Yak-tat Kwaan is interested.  Habitat: Other:	<ul> <li>Aquatic farming acceptable with standard mitigation.</li> <li>Crabbing conflicts but aquatic farming could be designed to accommodate crabbing. Do not want onshore facilities because this site is close to town.</li> <li>Used less than most Khantaak bays.</li> </ul>
16 (8b-1)	Rurik Harbor	Navigation: main anchorage for non-Yakutat boats during commercial fish openings. This is one of the deeper bays: 20 fathoms at mouth and has open channel. Has room to allow anchors to drag a little: mud bottom. Large vessel anchorage in mouth.  Subsistence: moderate Dungeness crabbing Commercial: not heavily used Recreation/tourism:  Aesthetics: Cultural: Habitat: moderate to high herring spawning; eel grass Other:	<ul> <li>Aquatic farming is acceptable with standard mitigation.</li> <li>Do not want onshore facilities. Coves are close to town and operators can commute.</li> <li>Relatively low use, lower than most Khantaak bays.</li> </ul>

Table F.1
Unit 8B: Existing Uses, Potential Conflicts, and Possible Mitigation by Site

No.	Name	Existing Uses and Potential Conflicts	Possible Mitigation
17 (8b-1)	Deep Bay  Moderate conflicts	Navigation: anchorage for large boats, 30 fathoms deep at mouth; 10 fathoms at the head of the bay; free from westerly winds common in summer.  Subsistence: shrimp pot, crab, salmon trolling.  Skiffs go to the end and anchor so people can pick sea weed on the outer beach, and/or picnic.  Commercial: not heavily used for commercial fishing.  Recreation/tourism: fishing, access to west Khantaak Island at head of bay, trolling, shrimp and crab Aesthetics:  Cultural:  Habitat:  Other: Probably wide enough for boats and aquatic farms. Trollers can pass close to shore because of deep waters.	<ul> <li>Aquatic farming is acceptable with standard mitigation. Avoid adverse impacts to anchorage.</li> <li>Concentrated anchorage of boats could degrade water quality for aquatic farming: wastewater discharge, improper garbage disposal.</li> </ul>
18 (8b-1)	Gonaka- detseat Bay  Moderate conflicts; need mitigation.	Navigation: Subsistence: shellfish-crab, relatively high. Coves north of area 18 are used for digging clams and cockles, subsistence & recreation fishing, & waterfowl hunting. Commercial: some commercial crabbing, formerly was a commercial set net site. Yak-tat Kwaan operates an oyster farm. Recreation/tourism: Aesthetics: Cultural: Habitat: moderate to low; herring spawning; not used some years Other: existing aquatic farm in operation with another proposed. The human activity and generator at the aquatic farm have reportedly driven away the game on the shores. See also Other in 19 (Ahduck Bay)	■Minimize adverse impacts to subsistence shellfish harvest. Avoid adverse impacts to exist ing aquatic farm operations.
19 (8b-1)	Ahduck Bay (Square Bay) Very sensitive	Navigation: boat traffic east of bay Subsistence: moderate king crab use; waterfowl, bear, northern end used for cockles, deer hunting. Preferred area for deer hunting on Khantaak. Commercial: crab; 10 fathom trench in northern end used for trolling; Recreation/tourism: access to west Khantaak Island for beachcombing, gumboot harvest, kayaking, berry picking, high recreation use Aesthetics: med-high Cultural: Habitat: moderate herring spawning Other: area between 18 and 19 receives low use. Kwaan has permit & new operation for scallops: lantern nets & single shell suspension. Experimental. Kwaan is using west side.	■Avoid impacts to navigation, recreation, and aesthetic qualities. Minimize impacts to subsistence. Possibly do not allow floating caretaker facilities.  ■Aquatic farming may be acceptable for the area between 18 and 19 with standard mitigation.  ■Would need restrictions that locate aquatic farms outside of troll drags. Do not allow caretaker facility or rafts; maintain low visibility of the farm facilities.

Table F.1
Unit 8B: Existing Uses, Potential Conflicts, and Possible Mitigation by Site

No.	Name	Existing Uses and Potential Conflicts	Possible Mitigation
20 A (8b-1)	West Dolgoi Island (west)	Navigation: narrow access to Johnstone Passage, somewhat shallow Subsistence: cockle & clam gathering (disease concern), deer hunting, highly preferred waterfowl site. Waterfowl are easily disturbed by boats. Commercial: highest concentration of Dungeness crab in bay along with #26. Juvenile crab rearing area. Recreation/tourism: Aesthetics: med-high Cultural: Habitat: mostly eel grass Other:	■Minimize impacts to navigation and aesthetic values.
20 B (8b-1)	West Dolgoi Island (east)  Possible consideration for closure to aquatic farming	Navigation: salmon trolling near Hatchet Pass, trollers anchor there in the summer.  Subsistence: relatively high; crab, seal, fish, waterfowl & geese, very good hunting for waterfowl (especially at north end)  Commercial: south end is one of top trolling areas, crabbing in summertime, commercial set nets 500 feet from streams  Recreation/tourism: trolling in south half in summertime. Too shallow for trolling in north half.  Aesthetics: med-high  Cultural:  Habitat: some eel grass, high level of herring spawning, coho streams come in on east shore Other: Native allotment on northwest shore (?)	■Carefully site to avoid impacts to significant fish and wildlife harvest, recreation, and aesthetic qualities.
21 (8b-1)	Broken Oar Cove sensitive to very sensitive	Navigation: used for loading large ships (log transfer) Subsistence: relatively moderate, some shrimp pots, low to moderate tanner & king crab, preferred for seal hunting Commercial: trolling Recreation/tourism: possible lodge on uplands, some locals keep skiffs here, kayak launching, recreational trolling Aesthetics: Cultural: Habitat: low to moderate herring spawning on south shore & tip of cove Other: road accessible from town, only log transfer facility for Yakutat forelands	■Avoid adverse impacts to log transfer. Minimize impacts to subsistence and recreation/tourism.

Table F.1
Unit 8B: Existing Uses, Potential Conflicts, and Possible Mitigation by Site

No.	Name	Existing Uses and Potential Conflicts	Possible Mitigation
22 (8b-1)	Puget Cove extremely sensitive	Navigation: heavily used offshore to 35 feet Subsistence: highly used for crab, fishing - may be heaviest used subsistence waters along with the Ankau entrance Commercial: fishing, some crabbing Recreation/tourism: high use potential. Currently used for sport trolling, shore casting.  Aesthetics: forested slopes hide the logging on the bench lands further inland. Excellent westward views of islands and Mt. St. Elias Cultural:  Habitat: a few coho spawning streams, moderate herring spawning, eel grass at head of cove Other: area is heavily used. Road from town approaches close to the cove.	■Avoid impacts to navigation, fish and shellfish harvest, recreation, settlement. Area may be candidate for closure due to significant conflicts.
23 (8b-1)	Redfield Cove  Extremely sensitive  Possible consideration for closure to aquatic farming.	Navigation: 200 feet deep close to shore Subsistence: prime for seal hunting, shrimping, crabbing, clams, & cockles; almost guaranteed to catch fish Commercial: trolling, especially along north shore over a 10 fathom trench, one of best troll drags in Yakutat Bay. Fishermen troll the entire cove because it is deep from bank to bank. Recreation/tourism: Aesthetics: some logging visible from water. Cultural: Habitat: herring concentration but little spawning. Other: uplands owned by Kwaan	<ul> <li>Avoid impacts to commercial trolling and subsistence activities.</li> </ul>
24 (8b-1)	Hatchet Pass (locally called Canoe Pass) Prohibitively sensitive	Navigation: main route, narrow, top spot for navigation to inner bay Subsistence: fishing, seal hunting, crabbing, shrimp, clam & cockle gathering in pass & in small cove Commercial: fish trolling all winter (preferred [possibly top] commercial trolling site) crab, shrimp. This is a top troll drag: the #1 spot in Yakutat Bay. Recreation/tourism: fish trolling all winter Aesthetics: Cultural: Habitat: spawning stream enters cove; major annual herring spawning, continuous eel grass on south shore Other:	■Avoid impacts to navigation and salmon trolling.

Table F.1
Unit 8B: Existing Uses, Potential Conflicts, and Possible Mitigation by Site

No.	Name	Existing Uses and Potential Conflicts	Possible Mitigation
25 (8b-1)	Southwest Johnstone Pass Not too sensitive -low conflicts	Navigation: shallow; 30 feet deep Subsistence: moderate Dungeness crabbing; a little waterfowl hunting Commercial: Recreation/tourism: low fishing Aesthetics: Cultural: Habitat: coho stream Other:	<ul> <li>Aquatic farming is acceptable with standard mitigation.</li> <li>Size of area might limit size of farm.</li> </ul>
26 (8b-1)	Crab Island Extremely sensitive Possible consideration for closure to aquatic farming	Navigation: common route to Yakutat Bay Subsistence: relatively heavy use, berries, clams, fishing, (waterfowl?), as valuable as Ankau Commercial: Recreation/tourism: adjacent to boat travel route, camping on spit, picnicking, local recreation Aesthetics: med-high Cultural: historic use documented Habitat: low herring spawning Other:	■This may be an area to close to aquatic farming due to significant conflicts. Avoiding adverse impacts may essentially make siting impossible.  ■Don't allow caretaker facility.
27 (8b-2)	Ankau #27 Somewhat sensitive	Navigation: shallow, some narrow passages Subsistence: shellfish - clams & cockles, water- fowl. Full range of subsistence activities. Commercial: Recreation/tourism: Aesthetics: med-high Cultural: culture camp 2-3 weeks in summer, May - July. Habitat: Other: possible clam growing; accessible by road from town, seniors go there	<ul> <li>May be area of Ankau system with less conflict.</li> <li>Avoid impacts to navigation.</li> <li>Minimize impacts to visual qualities, subsistence activities</li> </ul>
28 (8b-2)	Ankau #28 Sensitive	Navigation: narrow passages, shallow, almost dry at low tide Subsistence: crab(?), waterfowl Commercial: Recreation/tourism: access to Kardy Lake Aesthetics: med-high Cultural: Habitat: Other:	■Avoid impacts to navigation.

Table F.1
Unit 8B: Existing Uses, Potential Conflicts, and Possible Mitigation by Site

No.	Name	Existing Uses and Potential Conflicts	Possible Mitigation
29 (8b-1)	Prince Shoal not too sensitive	Navigation: Subsistence: clams, cockles, waterfowl hunting Commercial: Recreation/tourism: Aesthetics: Cultural: Habitat: low level herring spawning along shore & reef Other: exposed to rough weather	Aquatic farming is acceptable with standard mitigation.
30 (8b-1)	Yakutat Roads Sensitive	Navigation: common route Subsistence: crabbing, clamming on tidal reefs in south Commercial: Dungeness crabbing, trolling (moderate to low) Recreation/tourism: Aesthetics: Cultural: Habitat: regular herring spawning in south Other:	Aquatic farming is acceptable with standard mitigation. Avoid impacts to navigation.
31 (8b-1)	Canoe Pass North (local name Hatchet Pass) southern shore and cove are very sensitive	Navigation: common route: deep water (30 fathoms) Subsistence: cove is highly used for crabbing, clamming along point Commercial: king & tanner crab Recreation/tourism: cove is used for recreational fishing Aesthetics: Cultural: Habitat: coho runs in cove, cove is used for herring spawning Other:	<ul> <li>Aquatic farming is acceptable with standard mitigation.</li> <li>Avoid impacts to navigation.</li> <li>Do not want onshore facilities.</li> <li>Coves are close to town and operators can commute.</li> </ul>
32 (8b-1)	Southeast Johnstone Pass (Shaw's Cove) Main channel is deep (200 - 250 feet) and less sensitive	Navigation: common boat traffic; cove is shallow Subsistence: relatively high use in cove, low use for set netting in spring for king salmon. Seals, eels also harvested.  Commercial: trolling & set netting (low use) along shore, relatively low crab fishing in the cove.  Recreation/tourism: Aesthetics: Cultural: Habitat: cove is used for herring spawning: best herring spawning in bay; anadromous streams Other:	■Do not want onshore facilities. Coves are close to town and operators can commute.

Table F.1
Unit 8B: Existing Uses, Potential Conflicts, and Possible Mitigation by Site

No.	Name	Existing Uses and Potential Conflicts	Possible Mitigation
33 (8b-1)	North Puget Cove	Navigation: common boat traffic Subsistence: seal hunting, some clamming on reefs Commercial: Dungeness crab, moderate trolling Recreation/tourism: moderate trolling Aesthetics: Cultural: Habitat: Other:	<ul> <li>Avoid impacts to navigation.</li> <li>Do not want onshore facilities.</li> <li>Coves are close to town and operators can commute.</li> <li>Standard mitigation.</li> </ul>
34 (8b-1)	East Dolgoi	Navigation: exposed Subsistence: Commercial: important troll area Recreation/tourism: Aesthetics: Cultural: Habitat: Other:	■Avoid impacts to commercial trolling.
35 (8b-1)	North west shore of Dolgoi and smaller islands	Navigation: Subsistence: excellent clamming on reefs Commercial: Recreation/tourism: Aesthetics: Cultural: Habitat: Other:	■Standard mitigation.
36 (8b-4 & 8b-5)	Saltchuck (near the boat harbor) Somewhat sensitive	Navigation: Subsistence: sea cucumbers, sea urchins Commercial: Recreation/tourism: Aesthetics: Cultural: Habitat: Other: important use area by less mobile residents	■Avoid impacts to subsistence activities.